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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,791	03/06/2002	Erez Roe	82381	6684

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EXAMINER

REID, CHERYL M

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/090,791	Applicant(s) ROE ET AL.	
	Examiner Cheryl M. Reid	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

A

DETAILED ACTION

1. Claims 1-20 have been examined.

Priority

2. Request for priority date of March 21, 01 have been received and granted.

Claim Rejections - 35 USC § 103

3. Claims 1-10, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalman (US 6865149) and further in view of Fields (US 6771671).
4. In regards to claim 1, Kalman teaches about the service packets belonging to a particular service flow carry indication of a corresponding one of said signaling functions to be performed, while said one or more service flows (Col 3, lines 10-15, Col 16, lines 1-5). Kalman does not explicitly teach of multiplexing (combining) information flow and service flow. Fields teaches about multiplexing (Col 1, lines 65-67, Col 2, lines 1-5). One of ordinary skill in the art at the time of invention would be motivated to make the above-mentioned modifications for the reasons discussed in Fields (Col 1, lines 15-23, 59-62; Col 2, lines 50-61).
5. In regards to claims 2, Kalman teaches of arranging at the first operating point a source element capable of receiving the information flow from a first Ethernet device, arranging at the second operating point a sink element capable of transmitting the information flow to a second Ethernet device, producing at the source element the service packets forming said one or more service flows, at the source element. (Col 3,

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lines 10-15). Kalman does not explicitly teach of multiplexing (combining) information flow and service flow. Fields teaches about multiplexing (Col 1, lines 65-67, Col 2, lines 1-5). Motivation is same as discussed in Claim 1.

6. In regards to claim 3, Kalman teaches on this aspect (Col 3, lines 10-16).

7. In regards to claim 4, Kalma does not explicitly teach of multiplexing (combining) information flow and service flow. Fields teaches about multiplexing (Col 1, lines 65-67, Col 2, lines 1-5). Motivation is same as discussed in Claim 1.

8. In regards to claims 5 and 6 Kalman teaches about arranging one or more monitoring points between the two operating points (Col 3, lines 10-15) and operating points at least one additional operating point (node 3) comprising an additional source element and/or sink element, thereby forming two or more signaling channels between said two basic operating points (Fig 3).

9. In regards to claim 7, Kalman does not explicitly teach that a span of the network domain between said two operating points consists of segments which belong to Ethernet only, thereby enabling creation of the combined flow in the pure Ethernet. Fields implicitly teaches on this aspect (Col 3, lines 10-15). One of ordinary skill in the art at the time of invention would have been motivated to make the above-mentioned modifications because the affordability and popularity Ethernet as discussed in an analogous art (Computer Networking, A Top-Down Approach featuring the Internet, James Kurose and Keith W. Ross).

10. In regards to claim 8 ,9 , 10 and 15 Kalman implicitly teaches of ...segment(s) of a transport network and mapping packets of the combined flow into frames of a

transport network. Kalman's invention relates to transporting information from one node to another (Col 3, lines 10-20). Kalman does not explicitly teach of combine flows.

Fields teaches on this aspect (Col 1, lines 65-67, Col 2, lines 1-5). Motivation is same as discussed in Claim 1.

11. In regards to Claims 12, and 19 Kalman teaches of performance monitoring functions including at least one Tandem Connection function...and a signaling channel for performing one or more signaling functions at the level of Ethernet (Col 3, lines 10-17).

12. In regards to claim 13, Kalman teaches of producing one or more service flows of service packets (Col 3, lines 10-17). Kalman does not explicitly teach about composing from said information flow and said one or more service flows an outgoing combined (multiplexed) flow. Fields teaches about this aspect (Col 1, lines 65-67, Col 2, lines 1-5). Motivation is same as discussed in Claim 1.

13. In regards to Claim 14, Kalman implicitly teaches of one or more service flows are produced by a source function block based on monitoring at least one of the following two: the information flow and external instructions (Col 3, lines 10-15).

14. In regards to claim 16, Kalman teaches about one or more service flows formed from service packets (Col 3, lines 10-15) but does not explicitly teach of receiving an incoming combined flow composed from an information flow of Ethernet packets and one or more service flows. Fields teaches about receiving a combined(multiplexed) flow (col 1, lines 65-67, Col 2, lines 1-5). Motivation is same as discussed in Claim 1.

15. In regards to claim 18, Kalman teaches of producing one or more service flows of service packets (Col 3, lines 10-15). Kalman does not explicitly teach of receiving Ethernet information packets forming an information flow, composing from said information flow and said one or more service flows an outgoing combined flow with the signaling channel formed by said one or more service flows; the sink element for terminating the second signaling channel being capable of receiving an incoming combined flow composed from information flow of Ethernet packets and one or more service flows formed from service packets compatible with the information packets, separating from said incoming combined flow the one or more service flows and analyzing thereof to perform said signaling functions respectively assigned to said service flows. Fields teaches of combining(multiplexing) flows and de-multiplexing (col 1, lines 65-67, Col 2, lines 1-5, Col 3, lines 25-31). Motivation is same as discussed in Claim 1.

16. In regards to Claim 20, Kalman does not explicitly teaches about multiplexing (wherein the first signaling channel and the second signalling channel are one and the same signaling channel). Fields teaches about combining (multiplexed) flow (col 1, lines 65-67, Col 2, lines 1-5). Motivation is same as discussed in Claim 1.

17. In regards to claim 17, Kalman does not explicitly teach about de-mapping (extracting/demuxing) block capable of obtaining said incoming combined flow from frames. Fields teaches on this aspect (Col 3, lines 25-31, 42-45). Motivation is same as discussed in Claim 1.

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Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalman and Fields as applied to claim 1 above, and further in view of Naveh.

18. In regards to claim 11, neither Kalman or Fields when into explicit details about the format of a packet frame. Naveh teaches about the a particular signaling function in the header (ToS) and providing data on said particular signaling function in the data field...(col 3, lines 1-15, Fig 1a-1c). One of ordinary skill in the art at the time of invention would have been motivated to make the above-mentioned modifications for the reasons discussed in Naveh (Col 4, lines 20-25).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Nishikawa et al., discloses an interconnected device that connects distant networks via an intermediary transport network.
- Keenan et al., discloses integrating(multiplexing) voice and data using Ethernet.

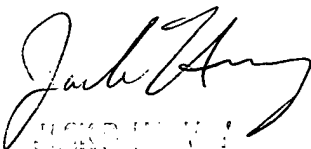
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl M. Reid whose telephone number is 571 272 3903. The examiner can normally be reached on Mon- Fri (7-3:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on (571)272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmr



JACK HARVEY
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